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A LIST OF BERMUDIAN BIRDS SEEN DURING JULY AND AUGUST, 1903.¹

HAROLD BOWDITCH.

THE following list comprises those birds which fell under my personal observation on or near the Bermuda Islands between the sixth of July and the twenty-second of August, 1903, the time of my stay at the Bermuda Biological Station. The names of such birds as are included in the Check-list of the American Ornithologists' Union are preceded by their respective check-list numbers, and every effort has been made to bring the scientific names down to date. I wish here to express my thanks to Prof. Edward L. Mark, Director of the Biological Station; Mr. John T. Nichols; Mr. Owen Bryant; Mr. Goodwin Gosling, of Hamilton; and the Messrs. Louis L. Mowbray and R. S. McCallan, of St. George, for their valuable aid in furthering my observations.

70. *Sterna hirundo* (?) Linn. Common Tern.—Terns were seen three times off the north shore, in each case a single individual, but not once was I near enough to make a positive identification. They were in all probability *S. hirundo*.

89. *Puffinus gravis* (?) (O'Reilly). Greater Shearwater.—A. Shearwater-like Petrel (family Procellariidæ) was seen in sight of Bermuda, July sixth; it was probably a Greater Shearwater, although certain identification of this bird and of the two others seen on the same day would not be possible without specimens.

109. *Oceanites oceanicus* (?) (Kuhl). Wilson's Petrel.—A "Mother Cary's Chicken" was seen from the S. S. "Gladisfen" on the "Challenger" bank, about twelve miles southwest of Gibbs' Hill, on the first of August. Identification was impossible, but the bird was probably a Wilson's Petrel. Merriam ('84, p. 284) reports finding a Leach's Petrel, dead, on the

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shore at "‘Tuckerstown Beach,’ May 1, 1881," and says : "The bird is common enough at sea a hundred or two miles from the Bermudas, but I never saw one near the islands."

112. *Phaëthon americanus* Grant. Yellow-billed Tropic Bird ; "Long-tail."—The Yellow-billed Tropic Birds were perhaps the most conspicuous birds in Bermuda until the middle of August, when their numbers seemed to decrease. These birds lay one egg with brown markings, in holes in the cliffs, almost always with no attempt at a nest ; as they are very close sitters, many opportunities are offered for study at short range. Mr. Owen Bryant found chicks in the "natal down" on Castle Island on June thirtieth. Eggs were found in Harrington Sound as late as July twenty-sixth, and a downy young bird was found on Brangman's Fort on August twelfth.

I was very much interested in observing the change in the plumage of the young "Long-tail," as seen in many specimens. The bird emerges from the egg covered with puffy white down, shaded with gray on the wings, and has a pale grayish bill, gray feet, and gray, unfeathered lores. This "natal down" is changed for a plumage of white, with black spots on the head, wings and back, and one black spot on the end of each tail-feather. The bill is yellowish flesh-color and grayish ; the lores are feathered, and the tail-feathers are all of the same length. During the persistence of this plumage, which in being speckled resembles that of the Red-billed Tropic Bird, the bill becomes yellowish orange, the tint which persists throughout life. The fact that I never saw a speckled bird on the wing, but always on the "nest," leads me to suppose that the speckled plumage is exchanged for a plumage indistinguishable from that of the adult bird, before the bird-of-the-year takes flight ; and it seems as if the change could not be due to wear, as the bars and spots of black are almost half an inch from the ends of the feathers.

194. *Ardea herodias* Linn. Great Blue Heron.—I saw one of these birds in Tucker's Town Bay, July fifteenth, and another was seen on an island near Hamilton Harbor on the eighth of August. Capt. Savile G. Reid ('84, p. 242), quoting Major edderburn, says : "In 1846 the nest of this bird, containing two eggs, was found amongst the mangrove trees at Hungry Bay." This is said to be the only known nest-record.

234. *Tringa canutus* (?) Linn. Knot ; Robin Snipe.—A single bird, probably of this species, was seen on July twenty-seventh on Cooper's Island, in company with three other waders, a Turnstone, a Spotted Sandpiper, and a supposed Sanderling. All were rather shy and hard to approach.

248. *Calidris arenaria* (?) (Linn.). Sanderling.—One instance, not a positive identification ; Cooper's Island, July twenty-seventh.

263. *Actitis macularia* (Linn.). Spotted Sandpiper.—I have only two days' positive records for the Spotted Sandpiper, namely July twenty-seventh, when I saw two or three on Cooper's Island ; and July twenty-ninth, two at Hungry Bay. However, Sandpipers were seen on one or two other days, and were probably the Spotted.

274. *Ægialitis semipalmata* Bonap. Semipalmated Plover : Ringneck.—One instance, a single bird on Cooper's Island, August twelfth.

283. 1. *Arenaria morinella* (Linn.). Ruddy Turnstone.—One record, Cooper's Island, July twenty-seventh.

289. *Colinus virginianus* (Linn.). Bob-white ; "Quail."—According to Capt. Savile G. Keid ('84, p. 227) these birds were imported from the United States in 1858 or 1859. My records for them extend from July seventh to August twentieth, seldom more than one in a day. I heard the spring call as late as August tenth, and was told that a brood of young was seen near the Hotel Frascati, where the Biological Station was located, shortly before my arrival in Bermuda.

320b. *Columbigallina passerina bermudiana* (Bangs and Bradlee). Bermuda Ground Dove.—This is one of the common Bermuda birds, being found especially in cultivated areas. It is very tame, allowing one to approach within two yards of it.

428. *Trochilus colubris* (?) (Linn.). Ruby-throated Hummingbird.—On July twentieth, as I was driving along the Middle Road, not far from the Whitney Institute, a Hummingbird flew over my head from among some oleanders. As the Ruby-throat is the only Hummingbird that has been taken in Bermuda (Reid, '84, p. 210), the bird that I saw was probably of this species. On July fifteenth another member of our party (Prof. Albert Mann) saw a Hummingbird in the same neighborhood.

488. *Corvus americanus* Aud. American Crow.—Messrs. Bangs and Bradlee (:01, p. 253) say: “. . . It is, however, doubtful if the Bermuda Crow is *Corvus americanus*. Its notes are said to be different, more like those of the European Carrion Crow (*Corvus corone* Linn.), a hoarse, raven-like croak.

During the season of 1900–1901, crows were seen but seldom and never more than three together at any one time. They were shy and their notes were not heard distinctly.”

I have several records, namely: July seventh, several heard calling on Paynter's Hill; July tenth, two heard calling in the direction of Harrington Sound, from the Flatts; August tenth, a flock of seven seen at close range (but not heard) on the South Shore, about opposite the Devil's Hole; August eleventh, three together, seen and heard on the southern shore of Harrington Sound, west of Patton's Point; and August twenty-first, one heard from the Biological Laboratory on the side of a neighboring hill. In neither flight, appearance, nor voice did any of these crows seem to me to differ from *Corvus americanus*, and I heard their cawing distinctly, especially on July seventh and August eleventh. I was told that there were three Crows' nests on Trunk Island, Harrington Sound, and was shown a nest on Cooper's Island on July twenty-seventh, said to have contained young birds earlier in the season.

593. *Cardinalis cardinalis* (Linn.). Cardinal Grosbeak; Red-bird.—The “Red-bird” is one of the most abundant of the residents, and I have an almost uninterrupted series of daily records from July seventh to August twenty-second, my entire stay, the single exception being on August first, which was spent on the “Challenger Bank,” twelve miles from shore. At Hungry Bay I saw a Cardinal's nest containing three or more young birds, on July twenty-ninth, a late date, for Reid says ('84, p. 201), “As a rule, the two clutches of eggs are deposited about April 10th, and May 30th, respectively.” Moseley ('79, p. 25) alludes to the fact that it is an introduced species, and Ridgway says (:01, p. 674), “the species is said to have been *introduced* from the eastern United States”; the date I am unable to determine.

Passer domesticus (Linn.). House Sparrow; “English” Sparrow.—Reid wrote in 1877 ('84, p. 196)¹ of two importations

¹Reprinted from 1877.

from New York, one "a few years ago," the second in 1874, and says, "I have no doubt they will increase and multiply after their manner, and in time become as much a nuisance as they are now a curiosity." This prophecy has been fulfilled, and I am told that the "English" Sparrows breed in Bermuda at all seasons. The Sparrows are interesting in one respect, namely, the fact that the adult birds, and especially the females, are noticeably lighter and more yellowish than the United States birds. That this is due to bleaching is proven by a specimen taken by my friend, Mr. Nichols. This bird is an adult female, in which the light colored, worn-out tail feathers are being replaced by a new set of typical dark ones.

Carduelis carduelis (Linn.). Goldfinch.—Reid ('84, pp. 196-197) says, "I observed a single specimen of the European Goldfinch, *Carduelis elegans*, near Harrington Sound, in April, 1875; it was very wild, and I could not get near it, but I imagine it must have been an escaped prisoner." This bird is now common in Bermuda, and I did not find it at all hard to approach, in spite of the fact that Bangs and Bradlee (:01, p. 256) state that it "is exceedingly shy and wary." By far the largest flock that I saw was at the Flatts, on August tenth, and contained about thirty birds. On June twenty-ninth Mr. Owen Bryant found a newly built nest of the Goldfinch on Trunk Island, Harrington Sound; it was in a cedar, some twenty-five feet from the ground and six or seven feet from the trunk of the tree. On July sixth it contained four eggs.

611. *Progne subis* (?) (Linn.). Purple Martin.—On August fourteenth, while between Coney Island and the Ferry Reach, I saw two Martins flying past the Martello Tower, southward. I was unable to determine the species, whether Purple or Cuban, but as the range of the Cuban Martin is, according to Chapman ('95, p. 320), "Southern Florida south to Cuba and probably Central America," the birds were in all likelihood Purple Martins. Reid ('84, p. 190) states that this bird "has only . . . appeared on one occasion, during the 'entrada' of September, 1849, when it was numerous." I looked this matter up in the "Natural History of the Bermudas," a collection by Miss H. T. Hurdis of scattered notes by her father, John L. Hurdis. His

only records of specimens fall in September, 1849, but he records martins seen by other people three times, viz.: August, 1847 (p. 26); September 19th, 1850 (p. 193); and April 24th, 1851 (p. 212).

631b. *Vireo noveboracensis bermudianus* (Bangs and Bradlee). Bermuda White-eyed Vireo; "Chick-of-the-village."—This bird ranks with the Cardinal and the Catbird in point of numbers; everywhere that one goes, he hears its characteristic song, translated into "chick-of-the-village" by the negroes. Bangs and Bradlee (:OI, p. 253) say, "The iris in *V. bermudianus* is white as in *V. noveboracensis*, and not "brownish, brownish gray, or gray," as stated by Capt. Reid. This seems to me to be a very hasty conclusion, as I have never seen a Bermuda Vireo with a pure white eye. The birds are very tame and familiar, and I made it something of a point to look at the iris whenever a good opportunity offered, with the result that I saw just two specimens with "dirty white" irides, and these had every appearance of being young birds. The irides of all the other birds of which I took note were dark.

Reid ('84, p. 192) says, "It is on record that the newly fledged young of this species have been found entangled in the meshes of the web of the 'silk' spider, *Epëira* [*Epeira*] *clavipes*. These webs are of great size and strength, extending for many feet between adjoining cedars, and the number of them among the woods in summer and autumn is almost incredible. In all my rambles, however, I never met with an instance of poor little Vireo having walked into *Epëira*'s parlor."

On the twenty-ninth of July I saw, at the edge of the mangrove swamp at Hungry Bay, a Vireo with a large mass of cob-web on the side of its head, completely covering the right eye. The left eye only was used, which necessitated the bird's turning on its perch in order to watch us, instead of simply turning its head.

704. *Galeoscoptes carolinensis* (Linn.). Catbird; "Black-bird."—Extremely common throughout the islands. During my stay in Bermuda I did not once hear the "mew" which gives the Catbird its name, and the song and the other notes of the Bermuda Catbirds sounded to me not quite identical with those of United States birds.

766. *Sialia sialis* (Linn.). Eastern Bluebird.—A very common bird. Bangs and Bradlee (:01, p. 255) state that the Bluebird is migratory as well as resident, so that “possibly some of” the migrants “remain and breed and thus counteract any tendency to vary that the island birds might develop if wholly cut off from the main body of the species.” Reid ('84, p. 175) says of the nests, “I have found them commonly in holes in old quarries or roadside cuttings; also in crevices of walls; in rocks, even when some little distance from the shore; in holes in trees; on the branches of trees; in stove and water pipes; in calabashes, boxes, etc., hung up for them in the verandas of houses, . . . and in several other curious situations.”

On July tenth Mr. Owen Bryant found a Bluebird's nest containing three young birds, built in the capstan of an old wreck near Coney Island. On the twenty-sixth of July Mr. John T. Nichols and I found some holes in a bank of sand, part of one of the cliffs nearly due north from the Devil's Hole, Harrington Sound; they were some four or more inches in diameter and a foot and a half to two feet deep, and two of them contained nests of soggy vegetable materials, one of which had in it a couple of bad eggs, probably Bluebirds'. This seemed to us a strange nesting site for the bird which we always associate with the hollow limb of an old apple tree.

Besides the twenty-one birds listed above, the following were reported to me :

On July twenty-third Mr. Leon J. Cole saw a Tattler (*Totanus*), probably *melanolencus*, at St. David's.

During July a large Hawk was seen by various members of the Bermuda Biological Station. His identification as a *Buteo* was all but complete.

On August sixteenth Mr. Louis L. Mowbray told me of a Snowy Owl (*Nyctea nyctea*) which had been seen on the afternoon of the previous day, in the Devonshire marsh. Swallows (probably Barn Swallows, *Hirundo erythrogastra*) were reported common.

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¹ Note.— This paper by A. H. Verrill, seems to have been overlooked by the author.— E. L. Mark.